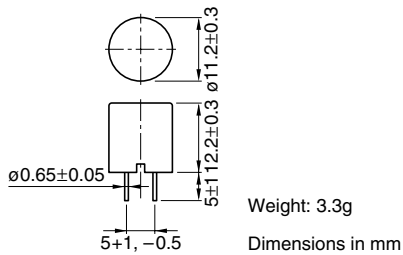


## SHAPES AND DIMENSIONS



## ELECTRICAL CHARACTERISTICS

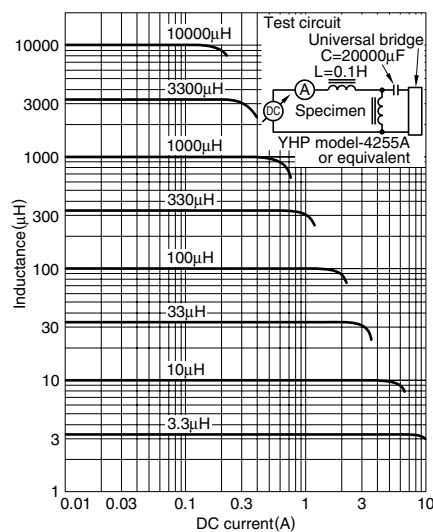
| Inductance<br>( $\mu\text{H}$ ) | Inductance<br>tolerance | Q<br>min. | Test<br>frequency<br>L/Q (Hz) | Self-resonant<br>frequency<br>(MHz)min. | DC<br>resistance<br>( $\Omega$ )max. | Rated current (A)*1max.       |                              | Part No.              |
|---------------------------------|-------------------------|-----------|-------------------------------|-----------------------------------------|--------------------------------------|-------------------------------|------------------------------|-----------------------|
|                                 |                         |           |                               |                                         |                                      | Based on inductance<br>change | Based on<br>temperature rise |                       |
| 1.0                             | ±20%                    | 15        | 1k/7.96M                      | 144                                     | 0.058                                | 14                            | 7.7                          | TSL1112□*2-1R0M7R7-PF |
| 2.2                             | ±20%                    | 15        | 1k/7.96M                      | 70                                      | 0.073                                | 10                            | 6.7                          | TSL1112□-2R2M6R7-PF   |
| 3.3                             | ±20%                    | 10        | 1k/7.96M                      | 36                                      | 0.01                                 | 8.8                           | 5.9                          | TSL1112□-3R3M5R9-PF   |
| 4.7                             | ±20%                    | 10        | 1k/7.96M                      | 28                                      | 0.015                                | 7.2                           | 4.8                          | TSL1112□-4R7M4R8-PF   |
| 6.8                             | ±20%                    | 10        | 1k/7.96M                      | 18                                      | 0.016                                | 6.1                           | 4.6                          | TSL1112□-6R8M4R6-PF   |
| 10                              | ±20%                    | 20        | 1k/2.52M                      | 16                                      | 0.025                                | 5                             | 3.7                          | TSL1112□-100M3R7-PF   |
| 15                              | ±20%                    | 20        | 1k/2.52M                      | 12                                      | 0.029                                | 4.2                           | 3.4                          | TSL1112□-150M3R4-PF   |
| 22                              | ±10%                    | 20        | 1k/2.52M                      | 9.5                                     | 0.04                                 | 3.4                           | 2.9                          | TSL1112□-220K2R9-PF   |
| 33                              | ±10%                    | 30        | 1k/2.52M                      | 7                                       | 0.062                                | 2.8                           | 2.3                          | TSL1112□-330K2R3-PF   |
| 47                              | ±10%                    | 30        | 1k/2.52M                      | 5.8                                     | 0.075                                | 2.3                           | 2.1                          | TSL1112□-470K2R1-PF   |
| 68                              | ±10%                    | 20        | 1k/2.52M                      | 4.7                                     | 0.13                                 | 1.9                           | 1.6                          | TSL1112□-680K1R6-PF   |
| 100                             | ±10%                    | 20        | 1k/796k                       | 3.8                                     | 0.16                                 | 1.6                           | 1.4                          | TSL1112□-101K1R4-PF   |
| 150                             | ±10%                    | 20        | 1k/796k                       | 3.1                                     | 0.26                                 | 1.3                           | 1.1                          | TSL1112□-151K1R1-PF   |
| 220                             | ±10%                    | 20        | 1k/796k                       | 2.5                                     | 0.33                                 | 1.1                           | 1                            | TSL1112□-221K1R0-PF   |
| 330                             | ±10%                    | 20        | 1k/796k                       | 2                                       | 0.52                                 | 0.88                          | 0.82                         | TSL1112□-331KR82-PF   |
| 470                             | ±10%                    | 10        | 1k/796k                       | 1.6                                     | 0.66                                 | 0.75                          | 0.72                         | TSL1112□-471KR72-PF   |
| 680                             | ±10%                    | 10        | 1k/796k                       | 1.3                                     | 1.1                                  | 0.61                          | 0.56                         | TSL1112□-681KR56-PF   |
| 1000                            | ±5%                     | 20        | 1k/252k                       | 1.1                                     | 1.4                                  | 0.51                          | 0.5                          | TSL1112□-102JR50-PF   |
| 1500                            | ±5%                     | 30        | 1k/252k                       | 0.82                                    | 2.4                                  | 0.43                          | 0.38                         | TSL1112□-152JR38-PF   |
| 2200                            | ±5%                     | 20        | 1k/252k                       | 0.76                                    | 3.2                                  | 0.35                          | 0.33                         | TSL1112□-222JR33-PF   |
| 3300                            | ±5%                     | 30        | 1k/252k                       | 0.64                                    | 4.9                                  | 0.28                          | 0.26                         | TSL1112□-332JR26-PF   |
| 4700                            | ±5%                     | 30        | 1k/252k                       | 0.54                                    | 7.6                                  | 0.24                          | 0.21                         | TSL1112□-472JR21-PF   |
| 6800                            | ±5%                     | 30        | 1k/252k                       | 0.45                                    | 9.8                                  | 0.2                           | 0.18                         | TSL1112□-682JR18-PF   |
| 10000                           | ±5%                     | 30        | 1k/79.6k                      | 0.38                                    | 18                                   | 0.17                          | 0.14                         | TSL1112□-103JR14-PF   |
| 15000                           | ±5%                     | 50        | 1k/79.6k                      | 0.29                                    | 24                                   | 0.13                          | 0.12                         | TSL1112□-153JR12-PF   |

\*1 Rated current: Value obtained when current flows and the temperature has risen to 25°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.

\*2 □: Please specify packaging style, S(Bulk) or RA(Taping).

## TYPICAL ELECTRICAL CHARACTERISTICS

### INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



• All specifications are subject to change without notice.